

VERTE.032CPCCC1D

PATENT

Serial No. 10/726,774

Response to Final Action of March 15, 2006 and
Advisory Action of April 18, 2006REMARKS

Claims 1-11 are in the case.

The Advisory Action of April 18, 2006 is noted with appreciation. The Advisory Action was helpful in clarifying the grounds of rejection for independent claims 1 and 5. The Advisory Action clarified that independent claims 1 and 5 were being rejected under 35 U.S.C. § 103(a) as being obvious in view of U.S. Patent 5,017,236 ("Moxness"). Specifically, the Advisory Action has taken the position that it would have been obvious for one skilled in the art to obtain the claimed method by modifying the Moxness cleaning system to "rearrange the transducer assembly of Moxness to be built into the structure/walls above or below the process chamber."

As discussed in Applicant's Reply of April 4, 2006, this position is both legally and technologically flawed. For the record, it is still Applicant's legal position that the rejection of the claims in the Final Action are insufficient to establish a *prima facie* case of obviousness because no factual evidence was presented to support the obviousness rejections of claims 1-11.

From a technology standpoint, the obviousness rejections are also clearly flawed and incorrect because one skilled in the art would not be motivated to modify the Moxness system in the manner proposed in the Advisory Action. While Applicant's arguments are already on the record, the basic argument will be set forth again below. Because the position taken in the Advisory Action to support the rejection of the claims over Moxness is so technologically untenable, it can only be assumed that the merits of Applicant's arguments were not fully considered and/or appreciated.

A critical design aspect of the Moxness system is disclosed to be exposing the entirety of the substrate surfaces to the intensified sonic energy. *See Moxness*, Col. 3, ll. 3-10. The importance of exposing the entire surface of a substrate to the sonic energy during a cleaning process is well known and accepted throughout the art. However, if one were to position the transducer assembly 20, 22 of the Moxness system in a vertical orientation in the wall either above or below the substrate 14 (as suggested in the Advisory Action), the intensified sonic

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energy would only come into contact with a small portion of the substrate's 14 area. As a result, a majority of the substrate 14 would not be subjected to sonic energy at all while a small area of the substrate would be subjected to an intense amount of sonic energy. This defeats the goal of uniform processing and total surface processing. Moxness itself teaches that it is desirable to expose the entirety of the substrate's surfaces to the sonic energy. Therefore, one skilled in the art would not be motivated to modify the Moxness system so that the transducer assembly 20, 22 is in a vertical orientation in the wall either above or below the substrate 14 because only a portion of the substrate would be exposed to the sonic energy. In fact, Moxness teaches away from such a modification.

Furthermore, absolutely no motivation has been offered as to why one skilled in the art would modify the Moxness system as suggested in the Advisory Action. Thus, it is believed that the claimed invention is being reconstructed through the use of impermissible hindsight.

Finally, it does not naturally follow that modifying the Moxness to position the transmitter assembly above the substrate would result in the claimed invention. For example, the sonic energy of the Moxness transmitter may not pass through the substrate or produce vibration on the opposite side of the article, as is required by the claims.

The above arguments are already on the record and have been set forth as clearly as possible. However, in order to support the validity of these arguments, the Affidavits of John Korbler and Cole S. Franklin submitted and attached hereto. Both Mr. Korbler and Mr. Franklin are skilled in the art and are familiar with the status of the art of sonic cleaning at the time of the invention, which was to stream sonic energy across the wafer surfaces to effectuate particle removal. These Affidavits should be given considerable weight in reconsidering the impropriety of the current claim rejections from a technology standpoint.

For these reasons, it is believed that the rejections of claims 1-11 under 35 U.S.C. § 103(a) over Moxness are improper. Accordingly, it is respectfully requested that the rejections

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be withdrawn and the application allowed.

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